

[0089] An automated assembly for carrying out a first dimension electrophoresis separation of proteins and other macromolecules includes a supply magazine, an automated transferring device and an electrophoresis tank. The tank includes a rack supporting a plurality of gel tubes and includes a chamber for containing a buffer solution in contact with one end of the gel tubes. The assembly includes a planar cover member overlying the tank. The cover member has a plurality of apertures with a guide surface for guiding the pipette through the chamber to the top end of the gel tubes. The supply magazine includes a carousel for storing sample containers, a bar code reader, a holding device and an arm for transferring the sample container from the carousel to the bar code reader and the holding device. The transferring device includes a robotic assembly that is movable in three dimensions for removing a sample from a sample container and delivering the sample to a selected gel tube in the electrophoresis tank.